ABSTRACT OF THE DISCLOSURE

Liquid, injectable, aqueous solutions are transformed *in situ* to an expandable foam-like, space filling, and adherent biomaterial. Preferably, the foam-like biomaterial is the reaction product of a two-part liquid system to achieve the *in situ* formation thereof. The liquid system is generally comprised of a protein solution and a cross linker solution which may either be premixed and then applied to a site in need of the biomaterial, or simultaneously mixed and delivered through an in-line mixing/dispensing tip directly to the site. In especially preferred embodiments, an expandable foam-like biomaterial includes the reaction product of human or animal-derived protein material and a di- or polyaldehyde in the presence of a bicarbonate and an acidic titrant amounts sufficient to impart a cellular foam structure to the material.